

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JAN 25, 2001

OFFICE OF WATER

Dr. Morton Lippmann Interim Chair Science Advisory Board

Dear Dr. Lippmann:

Thank you for the Science Advisory Board Commentary Resulting from a Workshop on the Diffusion and Adoption of Innovations in Environmental Protection (EPA-SAG-EEC-COM-01-001). The Commentary is a valuable contribution to EPA's efforts to diffuse innovations in environmental protection. It offers important suggestions that can be applied within the Agency. The following are specific highlights that seem most relevant.

The idea of a diffusion plan offers EPA the opportunity to potentially ensure adoption of ideas and innovations, thus improving environmental compliance. Specifically, the Commentary suggests that in addition to analysis of goals, barriers, incentives and resources, a diffusion plan would include targeting social networks as a key mechanism for diffusion. This is based on studies showing that "most individuals evaluate an innovation on the basis of the experience of peers who have adopted it and not on the basis of scientific research by experts." A diffusion plan would go beyond advertising and financial incentives, to identifying early adopters (the specific persons, organizations or entities who are most ready to adopt an innovation) and supporting their efforts to diffuse innovations throughout their networks.

An especially important point made in the Commentary and the Appendix A: Summary Minutes of Public Workshop was the idea that often more than one innovation is lumped together, making diffusion more difficult. For instance, the ideas of watershed protection and, to a lesser degree, the use of social sciences in environmental protection, are known. However, the details of how and why may not be as well known or adopted. These details may include the sub-innovations of the larger innovation, such as adaptive management, inter-jurisdictional cooperation, and community cultural assessments. The suggestion that we "unravel" and plan for each of a multiple of diffusions is very helpful.

The suggestion that EPA develop guidance on diffusion plans is well taken. In order for the Agency to take the next step in adopting a diffusion approach, managers and staff will need to grapple with new ideas and decide how best to adopt them. It would be a valuable exercise to compare and contrast our normal communication and marketing efforts with diffusion principles. Such an analysis would be a first step in cultivating early adopters and could produce the best of both worlds with which to meet the various needs of the Agency regarding information dissemination and diffusion of innovations.

The idea of "policy entrepreneurs" provides an appealing label for innovative agency staff and may serve to motivate staff to be creative in accomplishing their goals. The Commentary suggests that EPA should use awards to encourage diffusion of innovations. In this light, EPA might choose to strengthen its award system to recognize the work of policy entrepreneurs.

Since environmental problems are human problems, it would be helpful if the Agency employed the expertise of scientists who study people, social process and the human-environmental relationship. Regardless of our ability to create innovations, the Commentary remarks that "ultimately, the perspectives of innovation developers do not matter much; the perspectives of potential adopters matter a great deal." This reminds us that while we understand the problems and have a number of solutions, it is more important to work with the people living with and trying to solve the problems so that they will create and/or adopt the best solutions.

Thank you again for the commentary.

Sincerely,

/ Signed /

Diane C. Regas Acting Assistant Administrator